GENERAL INDEX

A

Abscission, of sugar maple leaf, affected by photoperiod 365
Acer saccharum, photoperiodism, dormancy, leaf age, abscission 365
Achlya, sexual hormones 1
Addicott, F. T., Anatomical effects of Lygus injury to guayule 133
Agropyron cristatum, germination, seedling drought and frost resistance 340
Ahlgren, Gilbert H., Effect of 2,4-D on carbohydrate and nutrient-element content and on rapidity of kill of soybean plants growing at different nitrogen levels 188
Akamine, Ernest K., Persistence of 2,4-D toxicity in Hawaiian soils 312
Allium, aberrations, in nuclear and cell division, induced by irradiation 331, in chromosomes, induced by $C^{14}O_2$ 232
Ampelothamnus, floral morphology 447
Anatomy, of bean hypocotyl affected by indoleacetic acid 400; of cherimoya fruit 436; of intrapetiolar stipules of Ervatamia 106; of Lygus injury to guayule 133; of Peltastrobus reedae 174; of Sewardiella tuberifera 31; vascular, of flowers in Ericales 447
Andromedeae, floral morphology 447
Andropogon ischaemum, phosphorus-nutrition effect on nitrogen content and phosphorus-32 absorption 214
Annona cherimola, fruit morphology and anatomy 436
Apium; *see* Celery
Apomixis, inheritance in parthenium argentatum 96
Artemisia absinthium, root growth affected by growth-regulating substances 237
Ascorbic acid, content in citrus fruit, affected by insecticides 501
Ashby, William Clark, Effects of certain acid growth-regulating substances and their corresponding aldehydes on the growth of roots 237

B

Barley, affected by maleic hydrazide 272
Bartholomew, E. T., Some physiological effects of insecticides on citrus fruits and leaves 501
Battaglia, Emilio, Development of the tetrasporic embryo sac of Chrysanthemum viscosum 490; The tetrasporic embryo sacs of Plumbago coccinea, P. scandens, and Ceratostigma willmottianum 485
Baxter, Robert W., Peltastrobus reedae: A new sphenopsid cone from the Pennsylvanian of Indiana 174
Beal, J. M., book reviews 141; Chromosomal aberrations in onion roots from plants grown in an atmosphere containing $C^{14}O_2$ 232; Negative results following exposure of several kinds of seeds to cosmic rays and other radiations at high altitudes 533
Bean, absorption and translocation of 2,4-D 198; effects, of 3-(alpha-imino-ethyl) 5-methyl tetronic acid on chlorophyll inhibition 525; of beta methyl umbelliferone 135; of growth-regulators, on flowering 207, on water retention 70; of indoleacetic acid on hypocotyl growth 400, on respiration and growth 418; of maleic hydrazide 272; hypertrophy from uredial stage of rust 294; indicator crop in persistence of 2,4-D toxicity in soils 312
Benedict, H. M., Factors affecting the accumulation of rubber in seedling guayule plants 86
Bhargava, K. S., Formation and liberation of zoospores in Isoachlya anisospora var. indica 24
Bishop, J. R., Relation of halogen position to physiological properties in the mono-, di-, and trichlorophenoxyacetic acids 250
Blair, Byron O., Mesquite seed and seedling response to 2,4-D and 2,4,5-T 518
Bluegrass, Kentucky, dimorphic panicle formation 534
Bouteloua curtipendula, phosphorus-nutrition effect on nitrogen content and phosphorus-32 absorption 214
Boyes, J. W., The tetrasporic embryo sacs of Plumbago coccinea, P. scandens, and Ceratostigma willmottianum 485
Brassica, effect of maleic hydrazide 272
Burkholder, Paul R., Atypical growth of plants. III. Growth responses of virus tumors of Rumex to certain nucleic acid components and related compounds 42

C

Cambium, season of growth in geographic races of Pinus ponderosa 182
Canavanine, inhibition of maize embryos 52
Cantharellus cinnabarinus, carotenoids 228
Carbohydrate, content, in soybean plants grown at different nitrogen levels affected by 2,4-D 188, in guayule in relation to rubber accumulation 86; metabolism, and maleic hydrazide 272, and sulfur deficiency 300
Carcinogens, effect on roots 281
Carman, Glenn E., Some physiological effects of insecticides on citrus fruits and leaves 501
Carotenoids, of Cantharellus cinnabarinus 228
Cassiope, floral morphology 447
Cattleya, nutrient solution for culture 528
Celery, brown-spot disease 393
Cell division affected by neutrons and X-rays 331
Cephalosporium api, causing brown-spot celery disease 393
Ceratostigma, embryo-sac development 485
Chamaedaphne, floral morphology 447
Cherimoya, fruit morphology and anatomy 436
Chilling requirement in sugar maple 365
Chloris gayana, salt tolerance and chemical composition 259
Chloro-o-toloxyacetic acid, 4-, effects on flowering in crop plants 207

Chlorophenoxyacetic acid, 4-, effect on water retention and development of beans 70
Chlorophenoxyacetic acids, relation of halogen position to physiological properties 250
Chlorophenoxy compounds, absorption, translocation, and persistence in plants 198; effects, on Connecticut vegetation 76, on flowering in crop plants 207, on mesquite seeds and seedlings 518; interaction with nitrogen nutrition in soybean 188; persistence, in cotton 511, in Hawaiian soils 312; radioactive, methods used in tracing in plants 126
Chlorophyll, inhibition by 3-(alpha-imino-ethyl) 5-methyl tetronic acid 525
Chromosomal aberrations, induced by $C^{14}O_2$ 232, by neutrons and X-rays 331
Chrysanthemum viscosum, embryo-sac development 490
Citrus, fruits and leaves affected by insecticides 501
Cleveland, L. R. "The Whole Life Cycle of Chromosomes and Their Coiling Systems" 141
Coal balls, new sphenopsid cone (Peltastrobus reedae) 174
Coconut milk, effects, on roots in tissue culture 281, on virus tumor tissue 225
Cohen, Morris, Hypertrophy from the uredial stage of bean rust 294
Colchicine, method to induce polyploidy in rice 327
Corn; *see* Zea
Cotton, effect of maleic hydrazide 112; leaf malformations induced by organic phosphate insecticides 221; seed injury from 2,4-D 511
Crabgrass, seed germination 57
Crafts, A. S., Some effects of maleic hydrazide on plants 272
Currier, H. B., Some effects of maleic hydrazide on plants 272

D

2,4-D; *see* Dichlorophenoxy compounds and Herbicides
Daubenmire, R. F., A comparison of season of cambial growth in different geographic races of Pinus ponderosa 182
Davis, Edwin A., Maleic hydrazide as a plant growth inhibitor 112
Day, B. E., Some effects of maleic hydrazide on plants 272
DDT, effects, on citrus fruits and leaves 501, on seed germination 130
Dhillon, A. S., Absorption, translocation, and persistence of 2,4-dichlorophenoxyacetic acid in some plants 198
Dichlorophenoxyacetate, sodium 2,4-, effects on flowering in crop plants 207
Dichlorophenoxyacetic acid, 2,4-, absorption, translocation, and persistence in plants 198; curvature effect in beans affected by maleic hydrazide 272; effects, in relation to nitrogen nutrition in soybean 188, on mesquite seeds and seedlings 518; persistence, in cotton 511, in Hawaiian soils 312
Digitaria sanguinalis, seed germination 57
Dormancy, in sugar maple, affected by photoperiod and temperature 365
Drought resistance in seedlings of Standard crested wheatgrass and Russian wild-rye 349
Dunlap, A. A., Persistence of 2,4-D stimulus in cotton plants with reference to its transmission to the seed 511

E

Eaton, Scott V., Effects of sulfur deficiency on growth and metabolism of tomato 300
Egler, Frank E., Herbicide effects in Connecticut vegetation 76
Elymus junceus, germination, seedling drought and frost resistance 349
Embryo sac, in Erythronium americanum 495; in Chrysanthemum viscosum 490; in Plumbago and Ceratostigma 485
Embryos, cotton, injured by 2,4-D 511; maize, inhibition of growth by canavanine 52
Embryology of Sewardiella tuberifera 31
Endosperm, development in Lobelia 319
Enkianthus, floral morphology 447
Enzymes, activity affected by temperature conditioning of seeds 57
Epigaea, floral morphology 447
Eragrostis trichodes, phosphorus-nutrition effect on nitrogen content and phosphorus-32 absorption 214
Ericales, floral morphology 447
Ergle, D. R., Persistence of 2,4-D stimulus in cotton plants with reference to its transmission to the seed 511
Ervatamia divaricata, intrapetiolar stipules 106
Erythronium americanum, embryo sac 495

F

Flax, seed germination 57
Floral differentiation, time in olive 323
Floral morphology in Ericales 447
Flowering and effects of growth-regulators in crop plants 207
Forest Service, "Woody-Plant Seed Manual" 142
Fossil, new sphenopsid cone (Peltastrobus reedae) 174
Frost resistance in seedlings of Standard crested wheatgrass and Russian wild-rye 349
Fungi, carotenoids of Cantharellus cinnabarinus 228; Cephalosporium apii as cause of brown-spot celery disease 393; incompatibility in Schizophyllum 143; inhibition by beta methyl umbelliferone 135; method of isolating the four spores from single basidium in Schizophyllum 139, for growing fruiting bodies of Schizophyllum 138; sexual hormones in Achlya 1; zoospores in Isoachlya 24
Fungicide, Bordeaux-mixture inhibition of Cephalosporium spore germination 393

G

Gauch, H. G., Salt tolerance and chemical composition of Rhodes and Dallis grasses grown in sand culture 259
Gene analysis, of weight per locule in tomato hybrids 163
Genetics, inheritance of apomixis in Parthenium argentatum 96; physiology of incompatibility factors in Schizophyllum 143
Geographic races, of Pinus ponderosa, cambial growth 182
Germination, seed, effects of DDT 130, temperature conditioning 57; Standard crested wheat grass and Russian wild-rye 349
Gerstel, D. U., On the inheritance of apomixis in Parthenium argentatum 96

Gortner, Willis A., Effect of pre-illumination on the response of split pea stems to growth substances 307
Gossypium; *see* Cotton
Grapefruit juice, from fruit affected by insecticides 501
Grass, nitrogen content and phosphorus-32 absorption affected by phosphorus nutrition 214; Rhodes, and Dallis grass, salt tolerance and chemical composition 259
Greenfield, Phyllis, Atypical growth of plants. III. Growth responses of virus tumors of Rumex to certain nucleic acid components and related compounds 42
Growth, cambial, in geographic races of Pinus ponderosa 182; effects, of canavanine on maize embryos 52, of dyes on virus tumor tissues of Rumex acetosa 290, of growth-regulating substances on roots 237, 281, of indoleacetic acid on bean hypocotyl 400, 418, of maleic hydrazide 112, 272, 329, of neutrons and X-rays 331, of nucleic acid components on Rumex virus tumors 42, of sulfur deficiency in tomato 300, of temperature and photoperiod on sugar maple 365
Growth-regulating substances, absorption, translocation, and persistence of 2,4-D in plants 198; effects, of beta methyl umbelliferone on green plants and fungi 135, of 2,4-D and 2,4,5-T on mesquite seeds and seedlings 518, of 2,4-D in relation to nitrogen nutrition in soybean 188, of indoleacetic acid on bean hypocotyl growth 400, and respiration 418, of pre-illumination in pea test 307; effects, on flowering in crop plants 207, on root growth 237, 281, on water retention in beans 70; maleic hydrazide 112, 272, 329; persistence, in cotton 511, in Hawaiian soils 312; radioactive, methods used in tracing in plants 126; relation of halogen position to physiological properties 250; tomato as test plant 521
Guayule, anatomical effects of Lygus injury 133; inheritance of apomixis 96; seedling rubber accumulation 86

H

Hamner, C. L., Chlorophyll inhibition and herbicidal action of 3-(alpha-imino-ethyl) 5-methyl tetronic acid 525; Selective inhibition of the growth of green plants and fungi by beta methyl umbelliferone 135
Haque, Ashraful, The embryo sac of Erythronium americanum 495
Hartmann, H. T., Time of floral differentiation of the olive in California 323
Harrimanella, floral morphology 447
Haustoria, origin and nature in Lobelia 319
Haxo, Francis, Carotenoids of the mushroom Cantharellus cinnabarinus 228
Helianthus, *see* Sunflower
Herbicides, absorption, translocation, and persistence of 2,4-dichlorophenoxyacetic acid in plants 198; chlorophyll inhibition by 3-(alpha-imino-ethyl) 5-methyl tetronic acid 525; effect, of 2,4-D in relation to nitrogen nutrition in soybean 188; effects, on Connecticut vegetation 76, on mesquite seeds and seedlings 518; relation of halogen position to physiological properties 250; tetronic acid derivatives 525
Histology, of bean hypocotyl affected by indoleacetic acid 400; of cherimoya fruit 436; of intrapetiolar stipules in Ervatamia 106; of Lygus injury to guayule 133; of Sewardiella tuberifera 31
Hopkins, H. T., Effect of DDT on germination of certain seeds 130
Hordeum; *see* Barley
Hormones; *see* Growth-regulating substances
Hormones, sexual, in homothallic species of Achlya 1
Hypertrophy, from uredial stage of bean rust 294

I

Incompatibility, sexual, in Schizophyllum 143
Indoleacetic acid, effects, on bean hypocotyl 400, on growth and respiration of bean 418, on roots 237, 281
Indole acetaldehyde, effect on roots 237
Insecticides, effects, on citrus fruits and leaves 501, of organic phosphate, inducing cotton-leaf malformations 221
Irradiation, inducing aberrations in nuclear and cell divisions 331
Isoachlya zoospores 24

J

Jepsen, G. L.; Simpson, G. G.; and Mayr, Ernst (eds.), "Genetics, Paleontology, and Evolution" 141
Just, Theodor, book review 536

K

Kent, Martha, Effect of pre-illumination on the response of split pea stems to growth substances 307
Khanna, A. L., Embryology of Sewardiella tuberifera Kash. 31
Klein, Richard M., Inhibitory and stimulatory effects of indoleacetic acid on development of the bean hypocotyl 400
Klomparens, Wm., Selective inhibition of the growth of green plants and fungi by beta methyl umbelliferone 135
Knudson, Lewis, Nutrient solutions for orchids 528

L

Larsen, Poul, book review 236
Leaper, J. M. F., Relation of halogen position to physiological properties in the mono-, di-, and trichlorophenoxyacetic acids 250
Leucothoe, floral morphology 447
Levine, Michael, Response of fibrous roots of sunflower and tobacco tissue cultures to plant growth substances 281
Light, effect of pre-illumination on pea test for growth substances 307
Light intensity, effect on rubber accumulation in guayule 86
Light sensitivity of seeds, affected by temperature conditioning 57
Linder, Paul J., Some methods used in tracing radioactive growth-regulating substances in plants 126
Link, George K. K., Inhibitory and stimulatory effects of indoleacetic acid on development of the bean hypocotyl 400
Linum usitatissimum, seed germination 57
Lobelia, origin and nature of haustoria 319

Lucas, E. H., Absorption, translocation, and persistence of 2,4-dichlorophenoxyacetic acid in some plants 198
Luong, D. C., A newly devised colchicine method for inducing polyploidy in rice 327
Lupinus albus, test for activity of chlorophenoxy compounds 250
Lutz, Louis, "Traité de cryptogamie" 142
Lycopersicon; *see* Tomato
Lygus, anatomical effects of injury to guayule 133
Lyonia, floral morphology 447

M

Maheshwari, P., "Embryology of Angiosperms" 236
Maize; *see* Zea
Maleic hydrazide, as plant growth inhibitor 112; as sprout inhibitor for potatoes 329; effects on mustard, barley, and beanplants 272
Marshall, Ernest R., Maleic hydrazide as a sprout inhibitor for potatoes 329
Marth, Paul C., Effect of growth-regulating substances on the water-retaining capacity of bean plants 70
McIlrath, Wayne J., Cotton-leaf malformations induced by organic phosphate insecticides 221; Persistence of 2,4-D stimulus in cotton plants with reference to its transmission to the seed 511
Megagametophyte, of Chrysanthemum viscosum 490; of Erythronium americanum 495; of Plumbago and Ceratostigma 485
Mehra, P. N., Embryology of Sewardiella tuberifera Kash. 31
Mesquite seedls and seedlings, effects of 2,4-D and 2,4,5-T 518
Metabolism, effects of sulfur deficiency on tomato 300
Michel, Burlyn E., Effects of indoleacetic acid upon growth and respiration of kidney bean 418
Mishanec, Wm., On the inheritance of apomixis in Parthenium argentatum 96
Mitra, G. C., Origin, development, and morphology of the intrapetiolar stipules of Ervatamia divaricata 106
Mitchell, John W., Effect of growth-regulating substances on the water-retaining capacity of bean plants 70; Some methods used in tracing radioactive growth-regulating substances in plants 126
Mitosis, influenced by neutrons and X-rays 331
Mullison, Wendell R., The tomato as a test plant for growth-regulators 521
Mustard; *see* Brassica

N

Naphthaleneacetic acid, effects on root growth of the acid and of the corresponding aldehyde 237
Naylor, Aubrey W., Maleic hydrazide as a plant growth inhibitor 112
Neopieris, floral morphology 447
Neutrons influencing nuclear and cell divisions 331
Nickell, Louis G., Atypical growth of plants. III. Growth responses of virus tumors of Rumex to certain nucleic acid components and related compounds 42; Effect of certain dyes on the growth *in vitro* of virus tumor tissue from Rumex acetosa 290; Effect of coconut milk on the growth *in vitro* of plant virus tumor tissue 225
Nicotiana; *see* Tobacco
Nielsen, E. L., Dimorphic panicle formation in Poa pratensis 534
Nitrogen, content in grass affected by phosphorus nutrition 214; effect of nutrient level on rubber accumulation in guayule 86; nutrition of soybean plants, interaction with 2,4-D 188
Nucleic acid components affecting Rumex virus tumor growth 42
Nutrient solutions, for orchids 528
Nutrition, effects of phosphorus on nitrogen content and phosphorus-32 absorption 214; of soybean plants affected by 2,4-D 188

O

Olive, time of floral differentiation in California 323
Olmsted, Charles E., Experiments on photoperiodism, dormancy, and leaf age and abscission in sugar maple 365
Onion; *see* Allium
Orange, fruits and leaves affected by insecticides 501
Orchids, nutrient solutions for culture 528
Organography, floral, in Ericales 447
Oxydendrum, floral morphology 447

P

Palser, Barbara F., book review 236; Studies of floral morphology in the Ericales. I. Organography and vascular anatomy in the Andromedeae 447
Papazian, H. P., A convenient method of growing fruiting-bodies of a bracket fungus 138; A method of isolating the four spores from a single basidium in Schizophyllum commune 139; book review 142; Physiology of the incompatibility factors in Schizophyllum commune 143
Parathion, effect, on citrus fruits and leaves 501, on cotton 220
Parthenium argentatum; *see* Guayule
Paspalum dilatatum, salt tolerance and chemical composition 259
Pea test for growth substances, affected by pre-illumination 307
Peltastrobus reedae, a new sphenopsid cone 174
Phaseolus; *see* Bean
Phosphate, organic, in insecticides, inducing cotton-leaf malformations 221
Phosphorus, effects on nitrogen content and phosphorus 32 absorption in grass 214
Photoperiod, effect on dormancy, leaf age, abscission in sugar maple 365
Pieris, floral morphology 447
Pigments, carotenoid, in Cantharellus cinnabarinus 228
Pinus ponderosa, cambial growth in geographic races 182
Plumbago, embryo-sac development 485
Poa pratensis, dimorphic panicle formation 534
Potatoes, sprout inhibition by maleic hydrazide 329
Potter, L. D., Comparative seedling characteristics of Standard crested wheatgrass and Russian wildrye 349
Powers, LeRoy, Gene analysis of weight per locule in tomato hybrids 163
Prosopis; *see* Mesquite

R

Rabideau, Glenn S., Effects of differences in phosphorus nutrition on the nitrogen content and phosphorus 32 absorption of four species of grass 214
Radioactive compounds, inducing chromosomal aberrations 232; phosphorus 32 absorption in grass affected by phosphorus nutrition 214
Radioactive growth-regulating substances, methods used in tracing in plants 126
Radioactivity, seeds exposed at high altitudes to cosmic rays 533
Radiobiological effects of slow neutrons and X-rays on nuclear and cell division 331
Raper, John R., Sexual hormones in Achlya. VII. The hormonal mechanism in homothallic species 1
Ramsey, G. B., Brown-spot disease of celery 393
Rasch, Ellen Myrberg, Nuclear and cell division in Allium cepa as influenced by slow neutrons and X-rays 331
Respiration, affected by indoleacetic acid 418
Rice, Elroy L., Effects of various plant growth-regulators on flowering in several crop plants 207
Rice, polyploidy induced by colchicine 327
Romney, V. E., Anatomical effects of Lygus injury to guayule 133
Roots, growth affected by growth-regulating substances 237, 281
Rubber accumulation in guayule seedlings 86
Rumex acetosa, virus tumor tissue, affected by coconut milk 225, by dyes 290, by nucleic acid components 42
Rust, bean, hypertrophy from uredial stage 294

S

Salinity, salt tolerance and chemical composition of grasses 259
Schizophyllum commune, method, for growing fruiting bodies 138, of isolating the four spores from a single basidium 139; physiology of incompatibility factors 143
Schroeder, C. A., Fruit morphology and anatomy of the cherimoya 436
Scully, N. J., Chromosomal aberrations in onion roots from plants grown in an atmosphere containing $C^{14}O_2$ 232
Seedling characteristics of Standard crested wheatgrass and Russian wild-rye 349
Seedlings, mesquite, effects of 2,4-D and 2,4,5-T 518
Seeds, exposure to high altitude radiation 533; light sensitivity affected by temperature conditioning 57; mesquite, effects of 2,4-D and 2,4,5-T 518
Sell, H. M., Selective inhibition of the growth of green plants and fungi by beta methyl umbelliferone 135
Sewardiella tuberifera, embryology 31
Sex organs, development in Sewardiella 31
Sexual hormones in Achlya 1
Sexuality, incompatib lity in Schizophyllum 143
Siegel, S. M., book review 142; Effects of exposures of seeds to various physical agents. I. Effects of brief exposures to heat and cold on germination and light sensitivity 57
Smith, D. C., Dimorphic panicle formation in Poa pratensis 534
Smith, M. A., Brown-spot disease of celery 393
Smith, Ora, Maleic hydrazide as a sprout inhibitor for potatoes 329
Soil moisture, effect on germination in Standard crested wheatgrass and Russian wild-rye 349, on rubber accumulation in guayule 86
Soils, Hawaiian, persistence of 2,4-D toxicity 312
Sorghastrum nutans, phosphorus nutrition effect on nitrogen content and phosphorus 32 absorption 214
Soybean, effect of 2,4-D in relation to nitrogen nutrition 188
Sphenopsid cone (Peltastrobus reedae) 174
Sporobolus airoides, seed germination 57
Srb, Adrian M., Inhibition of growth in maize embryos by canavanine and its reversal 52
Stewart, William S., Some physiological effects of insecticides on citrus fruits and leaves 501
Stipules, intrapetiolar, of Ervatamia divaricata 106
Strugger, Siegfried, "Praktikum der Zell- und Gewebephysiologie der Pflanze" 236
Subramanyam, K., Origin and nature of haustoria in Lobelia cardinalis 319
Sugar maple, photoperiodism, dormancy, leaf age, abscission 365
Sulfur, effects of deficiency on growth and metabolism 300
Sunflower roots affected by growth substances 281,

T

Temperature, conditioning of seeds, effects on germination and light sensitivity 57; effects, on dormancy in sugar maple 365, on rubber accumulation in guayule 86
Tissue cultures of sunflower and tobacco roots 281, of virus tumors of Rumex 42, 225, 290
Tobacco roots affected by growth substances 281
Tomato, gene analysis of weight per locule in hybrids 163; sulfur deficiency 300; test plant, for growth-regulators 521, for persistence of 2,4-D toxicity in soils 312
Toole, Eben H., Effect of DDT on germination of certain seeds 130
Translocation, in bean, affected by maleic hydrazide 272
Trelease, William, and Yuncker, Truman G., "The Piperaceae of Northern South America" 536
Trichlorophenoxyacetate, sodium 2,4,5-, effects on flowering in crop plants 207, on mesquite seeds and seedlings 518
Tsao, Tsung-Hsun, Effects of differences in phosphorus nutrition on the nitrogen content and phosphorus 32 absorption of four species of grass 214
Tukey, H. B., Chlorophyll inhibition and herbicidal action of 3-(alpha-imino-ethyl) 5-methyl tetronic acid 525
Tumors, virus, of Rumex, 42, 225, 290

U

Umbelliferone, beta methyl, selective inhibition of growth 135
Uromyces phaseoli typica, uredial stage causing hypertrophy 294

V

Vaughn, J. R., Selective inhibition of the growth of green plants and fungi by beta methyl umbelliferone 135

Vermillion, Gertrude, Effect of 2,4-D on carbohydrate and nutrient-element content and on rapidity of kill of soybean plants growing at different nitrogen levels 188
Virus tumors of Rumex 42, 225, 290

W

Wadleigh, C. H., Salt tolerance and chemical composition of Rhodes and Dallis grasses grown in sand culture 259
Wallace, Arthur, Effect of 2,4-D on carbohydrate and nutrient-element content and on rapidity of kill of soybean plants growing at different nitrogen levels 188
Water retention, in beans, affected by growth-regulating substances 70
Whaley, W. Gordon, Effects of differences in phosphorus nutrition on the nitrogen content and phosphorus 32 absorption of four species of grass 214
Wolf, Dale E., Effect of 2,4-D on carbohydrate and nutrient-element content and on rapidity of kill of soybean plants growing at different nitrogen levels 188
Wright, James E., Inhibition of growth in maize embryos by canavanine and its reversal 52

X

Xolisma, floral morphology 447
X-rays influencing nuclear and cell division 331

Y

Yarwood, C. E., Hypertrophy from the uredial stage of bean rust 294
Yuncker, Truman G., with William Trelease, "The Piperaceae of Northern South America" 536

Z

Zea, effect of maleic hydrazide 112; embryos, inhibition of growth by canavanine 52; inhibition of chlorophyll in seedling by 3-(alpha-imino-ethyl) 5-methyl tetronic acid 525
Zoospores in Isoachlya 24